Committee on Resources

Testimony

Subcommittee on Water and Power
Saturday, May 31, 1997
Lewiston, Idaho

TESTIMONY TO THE
COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES
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Thank you for inviting me to testify on the electrical power impacts from drawdowns, "natural river" or dam removal on the Snake and Columbia Rivers.

The various drawdown or dam removal scenarios we are aware of are:

1. Minimum operating pool for John Day Pool
2. Year-round natural river drawdown (breaching) of John Day Project
3. Year-round natural river drawdown (breaching of the four dams) on the lower Snake River
4. Year-round spillway crest drawdown for the John Day Project
5. A combined option with the lower Snake projects at natural river and the John Day Project at spillway crest

I am confining my remarks to electrical power impacts and will not address navigation, flood control, ecological damage to river habitat or whether or not these proposed actions are correct in any sense (Chart 1 provided by the Public Power Council illustrates the cost of BPA fish and wildlife programs 1996-2006 for scenarios Nos. 2 and 3).

The issue of minimum operating pool for the John Day Reservoir has a small power impact but is without merit from a scientific, political or economic viewpoint. No further discussion on minimum operating pool for John Day Reservoir is warranted.

All projects which may be involved in natural river or breaching would have to be reauthorized by Congress since one of the authorized purposes, power production, would no longer be possible. Spillway crest reduces John Day power production by more than 50 percent and is 50 percent more expensive to construct than natural river. I will focus the rest of my remarks only on natural river. There is $800-$900 million of remaining debt to retire with the present lower Snake projects. Without power production, this debt certainly should not be a Bonneville Power ratepayer obligation but rather a U.S. taxpayer obligation. Additionally, why would BPA ratepayers be obligated to pay for construction costs of $100 million per year for 50 years to breach dams when this construction eliminates power production? Chart No. 2 illustrates the estimated

annual debt service for new debt and lost power revenue (existing debt service is in addition to the numbers on Chart 2).

System stability is another overarching issue in the natural river concept. You may be aware of the west coast electrical power outages during high levels of spill (high spills mean that water is going through the spillway rather than through the turbines) at The Dalles, John Day and McNary Dams when McNary Dam tripped off line during an otherwise routine transmission line outage. The huge outage that resulted was due principally to inadequate generation (or Var support) at the north end of the Northwest intertie. With John Day Dam at natural river or even spillway crest, the AC-DC intertie will be severely derated year round. This intertie derating has substantial consequences for Canada, the Pacific Northwest, California and the Southwest.

The various natural river proposals would result in a loss of electrical power capacity of 2,400 to 3,483 MW for the four Snake River projects and 2,200 to 2,480 MW at John Day (spillway crest at John Day results in 1,157 MW lost power capacity). Most of the discussion about lost hydrogeneration seems to focus on the cost of replacement energy and how much cheaper it presently is than BPA energy. The loss of 4,600 to 5,963 MW of capacity will be very significant in its affect on firm energy prices and the ability to instantaneously meet electrical load requirements for our region. Replacing this lost capacity would require as many as 25 new 250 MW combustion turbines preferably located along the Columbia River (this is where the transmission lines are). Without debating how much more expensive new thermal generation is compared to hydrogeneration, should we be concerned about air quality, global warming or CO2 emissions? These new gas turbines would release 8,000,000 metric tons of pollutants into our Pacific Northwest air shed each year in replacing the approximate 2,440 average MW. When all the new combustion turbines ran for capacity replacement of 4,600 MW, emissions are at a rate of 16,000,000 metric tons per year. According to the EPA and BPA business plan EIS this is equivalent to about 3,300,000 more cars traveling 11,000 miles at 20 miles per gallon.

If BPA is required to pay $1 to $2 billion for the breaching of Ice Harbor, Lower Monument, Little Goose and Lower Granite Dams, their rates would increase 12 to 15 percent. This would put BPA's wholesale rate at 2.2 cents per kilowatt hour where non-federal energy is at 1.6 cents per kilowatt hour. Who will subscribe to BPA power that is 37 percent above other wholesale suppliers?

In summary, the capital costs for natural river on the lower Snake and John Day Projects are expected to be at more than $100 million per year for 50 years plus payments on the existing debt; the Northwest intertie will be severely limited; system stability would be significantly diminished unless the lost generation was replaced with new thermal generation on the north end of the intertie; BPA electric rates will increase. I believe all Pacific Northwest energy costs will escalate swiftly if we begin replacing our hydropower with thermal generation.

The natural river concept for portions of the Columbia and Snake Rivers would end the Pacific Northwest's competitive advantage for low-cost energy and low-cost food supply. The natural river concept could well help some salmon but would do nothing toward improving ocean conditions; or changing harvest levels; or improving mainstream habitat; or making hatcheries work. If we finally break the BPA bank, what do we replace it with? Will sports fishing actually provide hundreds or thousands of $10/hour jobs?

Isn't it time we acknowledge that we are not going to remove or breach dams--that we are not going to do deep drawdowns and that we are not going to drain Montana and Idaho for salmon? Isn't it time to accept that we have a system in place that is not going to be dismantled? We have, through the development of the

Columbia and Snake Rivers, given up annually abundant, naturally occurring salmon runs for the foreseeable future. A Columbia/Snake River system is the reality we have. We can and should improve our system for humanity as well as the other elements and creatures in our ecosystem. The existing system can be improved.

It is time for decisions to be made by our region and not solely by a federal agency. It is time to decide what we in the Pacific Northwest want our future to be.

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